LinkPower™ NL2-52004 L2+ Gigabit Managed Ethernet Switch

LinkPower™ NL2-52004 52-Port Layer 2+ Full Managed Ethernet Switch

The LinkPower™ NL2-52004 is a gigabit managed Ethernet switch independently developed by ONV. It has 48*10/100/1000Base-T adaptive RJ45 ports and 2*100/1000Base-X uplink SFP fiber ports. Each port supports wire-speed forwarding.

The NL2-52004 features L2+ network management functions, supporting IPv4 management and static routing forwarding, comprehensive security protection mechanisms, advanced ACL/QoS policies, and robust VLAN functionality for easy management and maintenance. It supports multiple network redundancy protocols such as RSTP (<50ms) to enhance link backup and network reliability. In the event of a one-way network failure, communication can be quickly restored to ensure uninterrupted data transmission for critical applications.

Depending on application requirements, configurations for port flow control, VLAN segmentation, QoS, and other network services can be managed through Web, CLI, SNMP, and Telnet. The NL2-52004 is designed to meet the demands of high-density network environments and is ideal for medium to large-scale deployments in hotels, campuses, business parks, shopping malls, tourist attractions, hospitals, and banks, providing a cost-effective, efficient, and reliable networking solution.

Key Features & Benefits

- **Gigabit Access, Uplink SFP Fiber Port**
  Supports non-blocking wire-speed forwarding with full-duplex and half-duplex modes, allowing flexible networking through a combination of Gigabit RJ45 and SFP ports.
- **Strong Business Processing Capability**
  Provides VLAN support, RSTP for network redundancy, IGMP Snooping for video applications, QoS with multiple priority modes, link aggregation for bandwidth optimization, and ACL for secure access control.
- **Security**
  Features port isolation, storm control, and 802.1X authentication to enhance network security and manage device access.
- **Stable and Reliable**
  Certified with CCC, CE, FCC, and RoHS, featuring LED indicators for device status, a high-redundancy power supply, and a metal housing for efficient heat dissipation and stable operation.
- **Easy O&M management**
  Supports CPU and memory monitoring, system logs, LLDP for link status checks, and multiple management methods, including Web, CLI, SNMP, and Telnet for efficient network maintenance.

Applications

- *Smart City*
- *IP Video Surveillance*
- *Campus Network*
- *Wireless Mesh Network*
- *Border Security Surveillance*
- *Municipal Network*
- *Energy & Re neries*
- *Hospitality Network*
- *Hotel Resort Network*
- *Hotspot Integration*
- *VOIP Service*
- *Traffic Monitoring*

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Model	NL2-52004
Interface Characteristics	
Fixed Port	1*RS232 console port(115200,N,8,1) 48*10/100/1000Base-T RJ45 ports (Data) 4*100/1000Base-X uplink SFP fiber ports (Data)
Ethernet Port	Port 1-48 can support 10/100/1000Base-T(X) auto-sensing, full/ half duplex MDI/ MDI-X self-adaption
Twisted Pair Transmission	10BASE-T: Cat3,4,5 UTP (≤100 meters) 100BASE-TX: Cat5 or later UTP (≤100 meters) 1000BASE-T: Cat5e or later UTP (≤100 meters)
Optical Fiber Port	Gigabit optical fiber interface, default no include optical module (optional single-mode/ multi-mode, single fiber/ dual fiber optical module. LC)
Optical Cable/ Distance	Multi-mode: 850nm /0-550m, Single-mode: 1310nm /0-40km, 1550nm /0-120km.
Chip Parameter	
Network Management Type	L2+
Network Protocol	IEEE 802.3 10BASE-T, IEEE 802.3i 10Base-T, IEEE 802.3u 100Base-TX, IEEE 802.3ab 1000Base-T, IEEE 802.3z 1000Base-X, IEEE 802.3x
Forwarding Mode	Store and Forward (Full Wire Speed)
Switching Capacity	104Gbps (non-blocking)
Forwarding Rate @64byte	77.38Mpps
CPU	750MHz
DRAM	1G
FLASH	256M

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Product Specifications

MAC	16K
Buffer Memory	12M
LED Indicator	Power: PWR (Yellow), System: SYS (Yellow), Network: Link/Act (Yellow), Fiber port: L/A(Green)
Reset Switch	Yes, One-button factory reset
Power Supply	
Total PWR / Input Voltage	60W/ (AC100-240V)
Power Consumption	Standby<35W, Full load<55W
Power Supply	Built-in power supply, AC 100~240V 50-60Hz, 1.0A
Physical Parameter	
Operation TEMP/ Humidity	-20~+55°C, 5%~90% RH Non condensing
Storage TEMP/ Humidity	-40~+75°C, 5%~95% RH Non condensing
Dimension (L*W*H)	440*290*44.5mm
Net /Gross Weight	3.6kg/ 4.5kg
Installation	Desktop, 1U/19" cabinet
Certification & Warranty	
Lightning Protection	Lightning protection: 4KV 8/20us, Protection level: IP30
Certification	CCC, CE mark, commercial, CE/LVD EN62368-1, FCC Part 15 Class B, RoHS
Warranty	3 years, lifelong maintenance.

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Network Management Feature	
Interface	IEEE802.3x flow control (Full duplex) Broadcast storm suppression based on port rate Port real-time traffic management (Flow Interval) Limit the rate of packet traffic on incoming and outgoing ports, mini granularity is 16Kbps and max is 1Gbps
L3 Feature	IPV4 static route/ default route
VLAN	Port-based VLAN (4K), VLAN based on the protocol IEEE802.1q, Port configuration of Access, Trunk, Hybrid
Port Aggregation	LACP dynamic aggregation, Static aggregation Max 26 aggregation groups and 8 ports per group
Spanning Tree	RSTP (IEEE 802.1w)
ERPS	ERPSv2
Multicast	Multicast VLAN, User quick exit mechanism, IGMP Snooping v1/v2
Port Mirroring	Bidirectional data mirroring based on port
QoS	802.1p/ DSCP priority mapping, Diff-Serv QoS Queue scheduling algorithm (SP, WRR, WFQ) Flow-based rate limiting, Flow-based packet filtering Flow-based based redirection, 8*Output queues of each port
ACL	Port-based and VLAN-delivered ACL The L2-L4 packet filtering function can match the first 80 bytes of the packet and provide information based on source MAC address, destination MAC address, source IP address, destination IP address, IP protocol type, TCP/UDP port, TCP/UDP port range to define the ACL.

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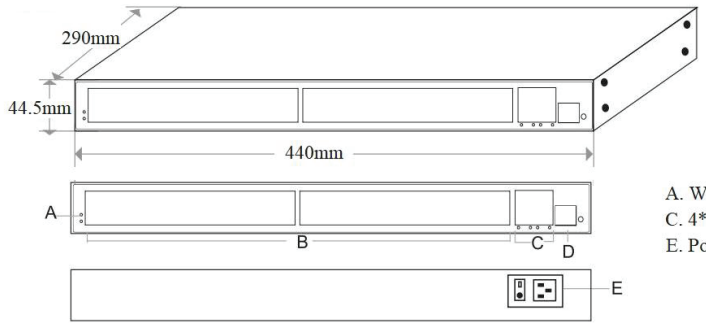
Product Specifications

Security	Port isolation, Port broadcast message suppression Port-based and Mac-based IEEE802.1X certification User hierarchical management and password protection AAA&RADIUS certification, IP source address protection
DHCP	DHCP Client, DHCP Snooping
Management	Web network management (https), Ping detection ONV-NMS platform cluster management (LLDP+SNMP) One click recovery, View CPU real-time utilization status Link Layer Discovery Protocol (LLDP), System work log Console/ Telnet and CLI configuration, SNMP V1/V2/V3 NTP clock, HTTP file upload and download management
System	Web browser: Mozilla Firefox 2.5 or higher, Google Chrome V42 or higher, Cat5 and above Ethernet cable TCP/IP, network adapter, and network operating system (such as Microsoft Windows, Linux, Mac OS X) installed on each computer in the network Cat5 and above Ethernet cable

Dimension



A. Working indicator
B. 48*10/100/1000M RJ45 ports
C. 4*100/1000M uplink SFP fiber ports
D. Console port
E. Power input port AC100-240V, 50/60Hz

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